

### REMARKS

This Amendment responds to the final Office Action mailed September 20, 2006. Claims 20-27 are pending. Claims 20 and 25 have been amended. In view of the foregoing amendments, as well as the following remarks, Applicants respectfully submit that this application is in complete condition for allowance and request reconsideration of the application in this regard.

Claims 20-27 stand rejected under 35 U.S.C. § 102(e) as anticipated by Yeo et al. (U.S. Patent No. 7,074,656), hereinafter *Yeo*. Of the rejected claims, claims 20 and 25 are the only independent claims. The Office Action contends that *Yeo* shows or teaches all the elements of the rejected claims. Applicants respectfully traverse this contention.

Independent claim 20 sets forth an SOI island comprising “a surface periphery with a surface facing toward the handle wafer,” and that the surface of the surface periphery and the handle wafer “are separated by a gap to have a non-contacting relationship.” Independent claim 20 also sets forth “a gate electrode surrounding and supporting the SOI island” in which the gate electrode extends “entirely around the surface periphery of the SOI island such that the gate electrode is disposed in the gap between the surface of the SOI island and the handle wafer.” *Yeo* fails to disclose or suggest at least this feature of Applicants’ independent claim 20.

Specifically, *Yeo* discloses that “the gate [electrode] (110) **almost** wraps about the body (112).” See column 3, lines 61-62 (emphasis added). In particular, the reason that the gate electrode (110) almost wraps about the body (112) is that the gate electrode (110) includes “gate extensions or encroachments 130 under the fin-like semiconductor body.” See column 3, lines 57-60. As apparent from Figures 1c, 3b of *Yeo*, the body (110) and the insulator (116) in *Yeo* are not separated by a gap. Instead, the surface of the body (110) facing toward the insulator (116) shares a boundary with the insulator (116) at a location between the gate encroachments (130). Therefore, the body (110) and insulator (116) have a contacting relationship. Consequently, this surface of the body (110) and the handle wafer represented by the insulator (116) are not separated by a gap, as set forth in independent claim 20. Because this gap is absent in *Yeo*, the gate electrode (110) in *Yeo* does not surround the body (110) and does not extend entirely about the surface periphery of body (110), as also set forth in independent claim 20.

In order for a reference to anticipate the invention in a claim, the reference must teach each and every element in the precise arrangement set forth in the claim. If the reference fails to teach even one of the claimed elements, the reference does not and cannot anticipate the claimed invention. Because of the deficiencies in its disclosure, *Yeo* fails to anticipate independent claim 20. Therefore, for at least this reason, Applicants respectfully request that the Examiner withdraw the rejection.

Furthermore, *Yeo* fails to provide a suggestion to modify its disclosure in a manner that would render independent claim 20 obvious. Specifically, *Yeo* fails to teach the desirability of modifying the body (110) and the handle wafer represented by the insulator (116) so that the body (110) and insulator (116) are separated by a gap and, therefore, no longer contacting.

Because claims 21-24 depend from independent claim 20, Applicants submit that these claims are also patentable for at least the same reasons as claim 20. Furthermore, these claims each recite a unique combination of elements not disclosed or suggested by *Yeo*.

Independent claim 25 is patentable for at least the same or similar reasons as independent claim 20. Because claims 26 and 27 depend from independent claim 20, Applicants submit that these claims are also patentable for at least the same reasons as claim 20. Furthermore, these claims each recite a unique combination of elements not disclosed or suggested by *Yeo*.

## **Conclusion**

Applicants have made a bona fide effort to respond to each and every requirement set forth in the Office Action. In view of the foregoing amendments and remarks, this application is submitted to be in complete condition for allowance and, accordingly, a timely notice of allowance to this effect is earnestly solicited. In the event that any issues remain outstanding, the Examiner is invited to contact the undersigned to expedite issuance of this application.

Applicants do not believe fees are dues in connection with filing this communication, other than a one month time extension fee. If, however, any fees are necessary

as a result of this communication, the Commissioner is hereby authorized to charge any under-payment or fees associated with this communication or credit any over-payment to Deposit Account No. 23-3000.

Respectfully submitted,

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Date

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